

Nov. 21, 1980

BEFORE THE BOARD OF
NATURAL RESOURCES AND CONSERVATION
STATE OF MONTANA

* * * * *

IN THE MATTER OF APPLICATION)
FOR RESERVATION OF WATER NO.)
1781-r BY THE MONTANA FISH)
AND GAME COMMISSION AND NO.)
10006-r BY THE MONTANA)
DEPARTMENT OF HEALTH AND)
ENVIRONMENTAL SCIENCES)

* * * * *

COMES NOW the Montana Board of Natural Resources and Conservation (Board), after due notice and hearing, and pursuant to MCA 85-2-316 hereby orders the modification of the above-referenced existing reservations as follows:

FINDINGS OF FACT

1. The Fish and Game Commission and the Department of Health and Environmental Sciences were granted instream flow reservations for August and September of 4,090 and 3,415 cfs, respectively for the Yellowstone River at Billings, Montana. This corresponds roughly to the 65th percentile flow and means that water in excess of the reservations occurs approximately 65 years out of 100. Flows granted for May 1-20, May 21-31, June 1-7, June 8-30, July 1-10, and July 11-31 represent approximately the 91, 81, 83, 80, 85 and 87 percentile level respectively. The instream reservations were given second priority in this reach of the Yellowstone River.

2. The conservation districts at Billings and upstream were given third priority.

3. To economically develop efficient, full-service irrigation systems, a good water supply is usually considered to be necessary about 8 years out of 10, on the average.

4. The conservation district reservations are junior to the instream reservation, and are constrained from use of water by its unavailability on an economic basis. For the months of August and September, the constraint imposed by the 65th percentile instream flow level does not allow for the economic development of the water reserved for the conservation districts in this reach of river.

5. The conservation districts at and above Billings were granted a water reservation for future irrigation opportunities. The reduction of instream flow reservations will result in the availability of water for meeting the conservation district reservations and for permitting by others subject to the terms and conditions of the instream flow reservations.

6. The instream flow reservation could be reduced during the irrigation season (May 1 through September 30) to the levels indicated in Table 1. These levels should not cause serious degradation of the aquatic and recreational resources nor result in degradation of the water quality in that reach of the Yellowstone. The priority of the instream reservation would prevent future irrigation withdrawals from increasing the frequency or severity of low flow events and at the same time, water availability would be increased.

7. The instream flow reservation on the Yellowstone River at Billings, Montana, as shown in Table 1 is sufficient to meet the objectives of the subject reservations.

Table 1. Proposed Instream Flow Reservation, Yellowstone River at Billings, Montana (May 1 - September 30)

<u>Month</u>	<u>CFS</u>	<u>Flow</u>	<u>AF</u>	<u>Approx. Percentile</u>
May (1-20)	5,121		203,132	91.3
May (21-31)	12,200		266,177	81.3
Jun (1-7)	17,236		239,306	83.8
Jun (8-30)	18,716		853,816	81.0
Jul (1-10)	10,274		203,781	85.2
Jul (11-31)	4,000		166,611	95.5
Aug	3,500		215,205	83.0
Sept.	3,107		184,878	81.0

8. The Board must periodically review existing reservations to ensure the objectives of the reservation are being met.

9. Review of the instream reservations at Billings necessarily requires concurrent review of the Fish and Game Commission reservation and the Department of Health and Environmental Sciences reservation.

CONCLUSIONS OF LAW

1. The objectives of the Fish and Game Commission reservation and the Department of Health and Environmental Sciences reservation granted for the Yellowstone River at Billings, Montana are not being met.

2. The subject reservations should be modified to ensure that the objectives of the reservations are met.

ORDER

The Board hereby modifies the subject reservations above-described as herein set forth by amending the "Order of the Board of Natural Resources and Conservation Establishing Water Reservations" issued December 15, 1978 as follows:

1. At page 40, by striking at 110(i) the figure "3,902,134 and inserting in lieu thereof the figure "3,679,968", so that 111(i) will read as follows:

"For the middle Yellowstone River defined as that part of the Yellowstone River at the City of Billings, Montana, the Montana Fish and Game Commission is granted an instream reservation at this part of the stream equal to 3,679,968 acre-feet per year. An approximation of the reservation based on USGS gauging data at Billings is shown in Table 0-6."

2. At page 45, by striking at 111(c) the figure "3,902,134" and inserting in lieu thereof the figure "3,679,968", so that 111(c) will read as follows:

"(c) An instream reservation at Billings Montana, which is equal to 3,679,968 feet of water per year of the Yellowstone River. The approximately monthly flows of this reservation are shown in Table 0-6."

3. At page 57, by striking all the material contained in Table 0-6 in its entirety and by inserting in lieu thereof the following material so that Table 0-6 reads as follows:

INSTREAM RESERVATION

Yellowstone River at Billings
(DFG Request Less Depletions through Billings)

<u>Month</u>	<u>CFS</u>	<u>AF</u>	<u>Approx. %ile</u>
January	2,483	152,688	55.4
February	2,484	137,940	61.6
March	2,883	177,278	55.5
April	3,580	213,048	59.0
May (1-20)	5,121	203,132	91.3
May (21-31)	12,200	266,177	81.3

<u>Month</u>	<u>CFS</u>	<u>AF</u>	<u>Approx. %ile</u>
June (1-7)	17,236	239,306	83.8
June (8-30)	18,716	853,816	81.0
July (1-10)	10,274	203,781	85.2
July (11-31)	4,000	166,611	95.5
August	3,500	215,205	83.0
September	3,107	184,878	81.0
October	3,573	219,694	59.4
November	3,478	206,976	57.8
December	<u>2,781</u>	<u>171,008</u>	59.9
Total Months (Av. 4,989 cfs)		3,611,538	

Plus Dominant Discharge of 34,507 cfs +68,430 af/day for one 24-hour period

Total Reservation (Av. 5,083 cfs) 3,679,968

4. At page 311, by striking at 79 the figure "3,846,025" and inserting in lieu thereof the figure "3,611,538", and by striking at 79 the figure "3,914,455" and inserting in lieu thereof the figure "3,679,968"; and by striking the material contained in monthly breakdown in its entirety and inserting in lieu thereof the following material so that 79 will read as follows:

"79. It is established to the satisfaction of the Board that the amount necessary for the purpose of the instream reservation of the Yellowstone River at Billings, Montana is 3,611,538 acre-feet per year plus the dominant discharge of 68,430 acre-feet for a total instream

reservation 3,679,968 af/yr. This quantity is the DFG's request less depletions through Billings. The monthly breakdown is as follows:

<u>Month</u>	<u>CFS</u>	<u>AF</u>	<u>Approx. %ile</u>
January	2,483	152,688	55.4
February	2,484	137,940	61.6
March	2,883	177,278	55.5
April	3,580	213,048	59.0
May (1-20)	5,121	203,132	91.3
May (21-31)	12,200	266,177	81.3
June (1-7)	17,236	239,306	83.8
June (8-30)	18,716	853,816	81.0
July (1-10)	10,274	203,781	85.2
July (11-31)	4,000	166,611	95.5
August	3,500	215,205	83.0
September	3,107	184,878	81.0
October	3,573	219,694	59.4
November	3,479	206,976	57.8
December	<u>2,781</u>	<u>171,008</u>	59.9
Total Months (Av. 4,989 cfs)		3,611,538	

Plus Dominant Discharge of 34,507 cfs +68,430 af/day for one 24-hour period

Total Reservation (Av. 5,083 cfs) 3,679,968

5. At page 342, by striking at 34(c)(1) the figure "3,914,458" and inserting in lieu thereof the figure "3,679,968"; and by striking 34(c)(2) the material contained in the month breakdown in its entirety and by inserting in lieu thereof the follow-

ing material so that 34(c) reads as follows:

(c) An instream reservation of the Yellowstone River at Billings, Montana, is granted for the following amounts:

- (1) A total of 3,679,968 acre-feet per year of the Yellowstone River at Billings is reserved.
- (2) The monthly breakdown of this reservation is as follows:

<u>Month</u>	<u>CFS</u>	<u>AF</u>
January	2,483	152,688
February	2,484	137,940
March	2,883	177,278
April	3,580	213,048
May (1-20)	5,121	203,132
May (21-31)	12,200	266,177
June (1-7)	17,236	239,306
June (8-30)	18,716	853,816
July (1-10)	10,274	203,781
July (11-31)	4,000	166,611
August	3,500	215,205
September	3,107	184,878
October	3,573	219,694
November	3,478	206,976
December	<u>2,781</u>	<u>171,008</u>
Average	4,989	3,611,538

Plus Dominant Discharge of 34,507 cfs +68,430 af/day for one 24-hour period

Total Reservation (Av. 5,083 cfs) 3,679,968

6. The Board reaffirms the December 15, 1978 Order except as is specifically amended by the Board action herein.

DATED this 21st day of November, 1980.

Cecil Weeding

Cecil Weeding, Chairman